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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,115	03/14/2005	Seiji Nakayama	403265	3130

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EXAMINER	
WOODWARD, ANA LUCRECIA	

ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
01/21/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/517,115	NAKAYAMA ET AL.	
	Examiner	Art Unit	
	Ana L. Woodward	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *January 06, 2009; May 06, 2008*.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *33 and 39-89* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *33 and 39-89* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/6/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 40, 48, 57, 65, 73 and 82 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 40, 48, 57, 65, 73 and 82, line 2, the term "polyester", in lieu of the term --polyamide--, is questioned.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 33 and 39-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1239008 or U.S. 6,733,853 (both to Takashima et al) in view of U.S. 6,129,961 (Sonoda et al) as per reasons of record.

The Takashima et al references each disclose compositions having high clarity comprising (A) ***preferably*** 3 to 40% by mass of a m-xylylene group-containing polyamide resin (A) and 97 to 60% by mass of polyethylene terephthalate (B). The references differ in essence from the present base claims in not expressly disclosing i) a polyester comprising a fine powder content of 1,000 ppm or less and ii) either 3 pbw (claims 33, 47, 54 and 88) or an upper limit of 2 pbw (claims 63, 72, 79 and 89) of polyamide per 100 pbw of polyester.

Regarding the first essential difference, the benefit of using polyesters governed by low contents of fine powder, for the purpose of providing compositions governed by superior transparency and flavor retention useful in applications similar to those of Takashima et al, is well known in the art (per Sonoda et al - abstract, examples, etc.). Accordingly, it would have been obvious to one having ordinary skill in the art to have employed a polyester with low fine powder content in the compositions of Takashima et al for the expected additive effect of improved transparency and flavor retention. This is particularly so, given that it is of upmost importance to Takashima et al to provide compositions having high clarity, that is, transparency, as well as flavor retention. Thus, absent evidence that the employ of the presently claimed polyester having low fine powder content results in unusual or unexpected results, no patentability can be seen in the presently claimed subject matter.

As to the second essential difference, it is urged that the 3.1 parts by weight of polyamide disclosed by Takashima et al constitutes the lower limit of the ***preferred*** range defining the polyamide content (column 6, line 42). It is by well now established that the disclosure by the reference of a preferred embodiment does not teach away from the entire disclosure of the patent. Polyamide contents lower than 3.1 parts by weight are deemed to be encompassed by the general disclosure of the references just so long as the content of the polyamide and the concentration of the phosphorus compound therein meet the formula (1), i.e., PxC/100 is less than or equal to 25 (column 6). When the value of formula (1) falls within the range of 25 or less, the composition has improved gas barrier properties with little darkening due to the deposition of metallic antimony. The claimed polyamide content and the lower limit of the prior art preferred range contain contents that are very similar (i.e., 2 or 3 parts versus 3.1 parts) and, as such, the prior art

establishes prima facie obviousness. Accordingly, absent evidence of unusual or unexpected results for the presently claimed upper limit of 3 parts, as opposed to the references' lower limit of 3.1 parts, no patentability can be seen in the presently claimed subject matter because the similar contents would have been expected to have the same properties.

No point of contention appears to exist with regard to Takashima et al not disclosing any of the various elements recited in the present claims. In this regard, it is noted that Takashima et al expressly exemplify i) alkali metal-containing phosphorus contents of 200 ppm or less, which content fulfills both the presently claimed alkali metal atom and phosphorus atom contents, ii) antimony atom contents of less than 200 ppm and iii) Color L values higher than 80 (Tables). As to the acetaldehyde and cyclic trimer contents (claims 42-44, it is maintained the use of the polyesters governed by low fine powder contents would necessarily satisfy said requirements, per Sonoda et al.

It is maintained that the combination of the cited references provides sufficient disclosure and guidance to one having ordinary skill in the art that control of the various elements claimed, e.g., polyamide content, antimony content, phosphorus content, polyester fine powder content, etc., is important to obtain compositions governed by superior properties inclusive of transparency and flavor retention. Accordingly, no patentability can be seen in the presently claimed subject matter.

Response to Arguments

4. Applicant's arguments filed January 16, 2009 have been fully considered but they are not persuasive.

Applicants assert that they have discovered that improved transparency (reduced haze) can be provided by regulating the polyamide content, the antimony content, the phosphorus content and/or, the polyester fine powder content in the composition. This recognition of improved transparency, however, is not deemed to be an unusual or unexpected result as one having ordinary skill in the art would have reasonably expected it from following the teachings and suggestions of the prior art. The property improvements noted by applicants are in keeping with what one having ordinary skill in the art would have reasonably expected by controlling and optimizing the various elements presently claimed. The control of these various elements in combination so as to provide a composition having superior properties takes into account knowledge which was within the level of ordinary skill at the time the claimed invention was made.

Applicants' argument, that even if the reference example 6 were modified to contain 2 wt% polyamide that said composition would not satisfy the present claims because there is no phosphorus in the polyamide, is not relevant to the present claims wherein a phosphorus content is not required, e.g., claims 33, 54, etc. In any event, the reference exemplifies compositions containing polyamides having a phosphorus compound, wherein said compositions all meet the limitations of formula (1) (Table 1, etc.). It is maintained that it would have been obvious to one having ordinary skill in the art to have used lower polyamide contents in said examples, e.g., 2 wt%, with the reasonable expectation that the resulting compositions would be governed by good gas barrier properties with little darkening due to the deposition of metallic antimony % because the limitations of formula (1) would still be met.

As to applicants' contention that there is no motivation to combine the disclosure of Sonoda et al, it is urged that it would have been obvious to one having ordinary skill in the art to have used a polyester with low fine powder content in the compositions of Takashima et al for the expected additive improvements in transparency and flavor retention. This is particularly so, given that it is of upmost importance to Takashima et al to provide compositions having high clarity, that is, transparency, as well as flavor retention. Thus, absent evidence that the employ of the presently claimed polyester having low fine powder content results in unusual or unexpected results, no patentability can be seen in the presently claimed subject matter.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (571) 272-1082. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ana L. Woodward/
Primary Examiner
Art Unit 1796